

Encephalitis (VEE) and further comprises an envelope derived from Sindbus virus (SIN) or Semliki Forest Virus (SFV).

90. A vaccine comprising one or more SARS virus antigens and one or more respiratory virus antigens.

91. The vaccine of claim 90, wherein said respiratory virus antigens are selected from the group consisting of influenza virus, human rhinovirus (HRV), parainfluenza virus (PIV), respiratory syncytial virus (RSV), adenovirus, metapneumovirus, and rhinovirus.

92. The vaccine of claim 91, wherein said respiratory virus antigen is from influenza virus.

93. The vaccine of claim 90, wherein said respiratory virus antigen is from a coronavirus other than the SARS virus.

94. A polypeptide comprising an immunogenic, surface exposed fragment of the amino acid sequence SEQ ID NO: 6042.

95. The polypeptide of claim 94, wherein said fragment does not include the last 50 amino acids of the C-terminus of SEQ ID NO: 6042.

96. The polypeptide of claim 94, wherein said fragment does not include a transdomain region of SEQ ID NO: 6042.

97. The polypeptide of claim 94, wherein said fragment does not include a C-terminus cytoplasmic domain of SEQ ID NO: 6042.

98. The polypeptide of claim 94, wherein said fragment does not include a N-terminus signal sequence.

99. An isolated polynucleotide comprising a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 9968 and 10066.

100. The polynucleotide of claim 99, wherein the polynucleotide comprising a nucleic acid sequence having >80% sequence identity to a polynucleotide sequence selected from the group consisting of SEQ ID NOS: 9968 and 10066.

101. An isolated polynucleotide comprising a fragment of at least 15 consecutive nucleic acids of a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 9968 and 10066 and wherein said fragment does not consist entirely of SEQ ID NO: 10033.

102. An isolated polypeptide comprising an amino acid sequence encoded by any one of claims **99-101**.

103. The polypeptide of claim 102, comprising an amino acid sequence selected from the group consisting of SEQ ID NOS: 9969-10032, 10067, and 10015.

104. The polypeptide of claim 103, wherein the amino acid sequence is selected from the group consisting of SEQ ID NOS: 9997, 9998 and 10015.

105. An expression construct for recombinant expression of a SARS virus spike protein wherein said construct comprises a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 6578-6583.

106. A mammalian cell line stably expressing a SARS viral antigen.

107. The cell line of claim 106, wherein said cell line is a Chinese Hamster Ovary (CHO) cell.

108. The cell line of claim 106, wherein the SARS viral antigen is a spike protein or fragment thereof.

109. The cell line of claim 106, wherein the spike protein is truncated to remove the transmembrane sequence.

110. A method of identifying a therapeutically active agent comprising the steps of: (a) contacting a therapeutically active agent with a buffer comprising SARS enzyme; and (b) measuring attenuation of the SARS enzyme.

111. The method of claim 110 wherein the SARS enzyme is a SARS protease.

112. The method of claim 111 wherein the buffer further comprises a peptide with a SARS protease cleave site.

113. The method of claim 110 wherein the measurement is made by the measurement of fluorescence.

114. A vaccine of one of claims 22 to 37, and **90** to **93** further comprising an adjuvant.

115. The vaccine of claim 114 wherein the adjuvant is a SMIP.

116. The vaccine of claim 115 wherein the SMIP compound is selected from the group consisting of an acylpiperazine, a tryptanthrin, an indoleione, a tetrahydroisoquinoline, a benzocyclodione, an amino azavinyl compound, a thiosemicarbazone, a lactam, an aminobenzimidazole quinolinone, a hydrophthalamide, a benzophenone, an isoxazole, a sterol, a quinazolinone, a pyrole, an anthraquinone, a quinoxaline, a triazine, an benzazole, and a pyrazolopyrimidine, or a pharmaceutically acceptable salt, ester, or prodrug thereof.

117. A method of vaccinating a subject comprising administering a vaccine of one of claims 22 to 37, and **90** to **93**.

118. The method of claim 117 further comprising administering a SMIP.

119. A method for treating a patient of one of claims 77 to 82 further comprising administering at least one SMEP compound.

120. A method for treating a patient of one of claims 77 to 82 further comprising administering at least one SMIS compound.

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